

REMARKS

Claims 1-30 are pending in the case. The Applicants have amended the specification with an Abstract of the Disclosure, set forth on a separate sheet at the conclusion of this communication. Moreover, the Applicants have amended claims 1, 2, 3, 4, 5, 7, 8, 10, 11, 12, 19, 23, 24, 25, 26, 28, 29 and 30 to particularly point out and distinctly claim the subject matter that the Applicants regard as their invention. Support for the present amendments is found throughout the specification and claims, as originally filed. No new matter has been added and no claims fees are believed to be due.

Objection under 37 CFR § 1.72(b) – Abstract of the Disclosure

The Examiner has objected to the present specification for failing to include an abstract of the disclosure as required under 37 CFR § 1.72(b). The Applicants wish to direct the Examiner's attention to the conclusion of this communication, in which the Applicants have set forth an Abstract of the Disclosure, in proper format and language, as required under 37 CFR § 1.72(b). Accordingly, the Applicants respectfully request reconsideration and withdrawal of the objection to the specification under 37 CFR § 1.72(b).

Objection under 37 CFR § 1.75(c)

The Examiner has objected to claims 7, 8, 11, 19 and 30 under 37 CFR § 1.75(c). Specifically, the Examiner has objected to claims 7, 8, 19 and 30 for various misspellings in the claim language therein. Moreover, the Examiner has objected to claim 11 for incorporating an improper dependent claim format. The Applicants respectfully direct the Examiner's attention to the "Amendments" section of the instant paper, in which the Applicants have amended the aforementioned claims in accordance with the Examiner's suggestions for overcoming the present objection. Accordingly, the Applicants respectfully request reconsideration and withdrawal of the objections to claims 7, 8, 11, 19 and 30 under 37 CFR § 1.75(c).

Rejection under 35 USC § 112, Second Paragraph

The Examiner has rejected claims 1, 5, 8, 12, 13, 23, 24, 25 and 28-30 under 35 USC § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. The Applicants wish to direct the Examiner's attention to the "Amendments" section of the instant paper, in which the Applicants have amended the aforementioned claims only to obviate the Examiner's rejection. Specifically, the Applicants have amended claims 1, 5, 8, 12, 13, 23, 24 and 25 to recite a proper format of alternative expressions. Moreover, the Applicants have amended claims 28-30 to recite the steps involved in each subject method. Accordingly, the Applicants respectfully request reconsideration and withdrawal of the rejections to claims 1, 5, 8, 12, 13, 23, 24, 25 and 28-30 under 35 USC § 112, second paragraph.

Rejection under 35 USC § 101

The Examiner has rejected claims 28-30 under 35 USC § 101 as reciting a use without setting forth any steps involved in the process. The Examiner's attention is respectfully directed to the "Amendments" section of the instant paper, in which the Applicants have amended claims 28-30 to recite the precise steps involved in each process. Reconsideration and withdrawal of the rejection to claims 28-30 under 35 USC § 101 are therefore respectfully requested.

Rejection under 35 USC § 102(b) over Herbots

The Examiner has rejected claims 1-8, 10-11, 21-24 and 26-30 under 35 USC § 102(b) as allegedly being anticipated by WO Patent Number 98/06808 to Herbots et al (hereinafter "Herbots"). The Examiner's rejection is respectfully traversed. The Applicants wish to direct the Examiner's attention to the "Amendments" section of the instant paper, in which the Applicants have amended claim 1 to recite the specific pectate lyase enzymes suitable for use in the present invention. In light of the present amendments, the Applicants respectfully submit that Herbots fails to disclose the specific pectate lyase enzymes of the present invention, as required to sustain a claim of anticipation. Rather, Herbots only minimally discloses broad groups of suitable enzymes for use therein, among which the general category of pectate lyase enzymes is provided. Reconsideration and withdrawal of the rejection to claims 1-8, 10-11, 21-24 and 26-30 under 35 USC § 102(b) are therefore respectfully requested.

Rejection under 35 USC § 103(a) over Herbots in view of Bostick

The Examiner has rejected claim 9 under 35 USC § 103(a) as allegedly obvious over Herbots in view of US Patent Number 5,334,326 to Bostick et al (hereinafter "Bostick"). The Examiner's rejection is respectfully traversed. The Examiner's attention is respectfully directed to the "Amendments" section of the instant paper, in which the Applicants have amended claim 1, from which claim 9 ultimately depends, to recite the specific groups from which the suitable pectate lyase enzymes of the present invention are selected. As Herbots, whether alone or in view of Bostick, fails to teach or suggest a detergent composition comprising a specific pectate lyase enzyme, a specific diaroyl peroxide and other detergent ingredients, the present rejection cannot be sustained. Reconsideration and withdrawal of the rejection to claim 9 under 35 USC § 103(a) are therefore respectfully requested.

Rejection under 35 USC § 103(a) over Herbots

The Examiner has rejected claim 25 under 35 USC § 103(a) as allegedly obvious over Herbots. The Examiner's rejection is respectfully traversed. Again, the Applicants wish to direct the Examiner's attention to the "Amendments" section of the instant paper, in which the Applicants have amended claim 1, from which claim 25 ultimately depends, to recite the specific pectate lyase enzymes suitable for use in the present invention. As Herbots neither teaches nor suggests the specific pectate lyase enzymes suitable for use herein, the reference cannot render obvious a detergent composition comprising said enzymes, a

specific bleach activator and other detergent ingredients. Reconsideration and withdrawal of the rejection to claim 25 under 35 USC § 103(a) are therefore respectfully requested.

Rejection under 35 USC § 103(a) over Herbots in view of Miracle

The Examiner has rejected claims 12-20 under 35 USC § 103(a) as allegedly obvious over Herbots in view of WO Patent Number 97/10323 to Miracle et al (hereinafter "Miracle"). The Examiner's rejection is respectfully traversed. The Applicants respectfully direct the Examiner's attention to the "Amendments" section of the instant paper, in which the Applicants have amended claim 1, from which claims 12-20 ultimately depend, to recite the specific pectate lyase enzymes suitable for use in the present invention. As Herbots, whether alone or in view of Miracle, neither teaches nor suggests a detergent composition comprising a specific pectate lyase enzyme, a specific bleach booster and other detergent ingredients, the present rejection cannot be sustained. Reconsideration and withdrawal of the rejection to Claims 12-20 under 35 USC § 103(a) are therefore respectfully requested.

CONCLUSION

Attached hereto at the conclusion of this communication is a "Version With Markings To Indicate Changes Made." Applicants have made an earnest effort to place the present claims in condition for allowance. WHEREFORE, entry of the amendments provided herewith, reconsideration of the claims as amended in light of the Remarks provided, withdrawal of the claims rejections, and allowance of Claims 1-30, as amended, are respectfully requested. In the event that issues remain prior to allowance of the noted claims, then the Examiner is invited to call Applicants' undersigned attorney to discuss any remaining issues.

Respectfully submitted,

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VERSION WITH MARKINGS TO INDICATE CHANGES MADE

1. A detergent composition comprising a detergent ingredient, a pectate lyase enzyme and bleach system selected from the group consisting of a metal bleach catalyst; a combination of a peroxygen source and a bleach booster selected from the group consisting of zwitterionic imines, anionic imine polyions having a net negative charge of from -1 to -3, and/or mixtures thereof; a diacyl peroxide and/or mixtures thereof wherein said pectate lyase enzyme is selected from the group consisting of: a pectate lyase which is a polypeptide produced by *Bacillus agaradhaerens*, NCIMB 40482 or DSM 8721; a pectate lyase which is a polypeptide produced by *Bacillus licheniformis* or ATCC 14580; a pectate lyase which is a polypeptide produced by *Bacillus haldurans*; a pectate lyase having an optimum activity at a pH of greater than about 7.0 and derived from *Streptomyces fradiae*, *Streptomyces nitrosporeus*, *Erwinia carotovora*, *Bacillus sphaeroides*, *Thermomonospora fusca*, *Pseudomonas solanacearum*, *Bacteroides thetaiotaomicron*, *Fusarium solani*, *Xanthomonas campestris*, *Bacillus agaradhaerens*, *Bacillus licheniformis* and mixtures thereof; and combinations thereof.

2. A detergent composition according to claim 1 wherein the metal bleach catalyst is selected from :
 - (a) the $[Mn(Bcyclam)Cl_2]$ catalyst;
 - (b) the cobalt catalyst having the formula : $Co[(NH_3)_n M_m B_b T_t Q_q P_p] Y_y$, wherein Cobalt is in the +3 oxidation from, n is an integer from 0 to 5, ~~preferably 4-5, more preferably 5;~~ M represents a monodentate ligand; m is an integer from 0-5, ~~preferably 1 or 2, more preferably 1;~~ B represents a bidentate ligand; b is an integer from 0-2; T represents a tridentate ligand; t is 0 or 1; Q is a tetradentate ligand; q is 0 or 1; P is an pentadentate ligand; p is 0 or 1 and $n+m+2b+3t+4q+5p=6$; Y is one or more appropriately selected counteranions present in a number y, where y is an integer from 1-3, ~~preferably 2-3, more preferably 2 when Y is a -1 charged anion, to obtain a charge-balanced salt;~~
 - (c) the cobalt catalyst having the formula $[Co(NH_3)_5 M] T_y$, wherein cobalt is in the +3 oxidation state; M is a carboxylate-containing ligand having the formula $RC(O)O^-$; and T is one or more counteranions present in a number y, where y is an integer to obtain a charge-balanced salt ~~(preferably from 1-3, more preferably 2 when T is a -1 charged anion);~~
 and/or mixtures thereof.

3. A detergent composition according to claim 2 comprising said metal bleach catalyst and further comprising a peroxygen source, preferably wherein said peroxygen source is selected from the group consisting of a hydrogen peroxide source, a peroxyacid bleach precursor compound, and/or mixtures thereof.

4. A composition according to claim 3 wherein the metal bleach catalyst is present in an amount of from 1ppb to 10%, ~~preferably from 0.1ppm to 1%, more preferably from 1ppm to 0.1%~~ by weight of total composition.
5. A detergent composition according to claim 1 wherein said diacyl peroxide is selected from the group consisting of dibenzoyl peroxide, benzoyl glutaryl peroxide, benzoyl succinyl peroxide, di(2-methyl benzoyl) peroxide, and/or mixtures thereof.
7. A detergent composition according to claim 1 wherein said diacyl peroxide is comprised in a particle; said particle comprising from 1-80% by weight of said particle of diacyl peroxide, from 0.01-95% by weight of said particle of a water soluble ~~stabilising~~ stabilizing additive.
8. A detergent composition according to claim 7 wherein said ~~stabilising~~ stabilizing additive is selected from the group consisting of alkali metal sulfates and citrates, ethoxylated C16-20 alcohols, polyethylene glycols melting above 100°F, maltodextrins, polyacrylate polymers and copolymers of molecular weight between 1.000 and 80.000, ethylene diamine tetra-acetates, ethylene diamine disuccinates and/or mixtures thereof.
10. A detergent composition according to claim 1 wherein said diacyl peroxide is comprised at a level of from about 0.01% to about 20% by weight of the composition; ~~preferably 0.5% to 10%, more preferably 0.2% to 3%.~~
11. A detergent composition according to ~~claim 10~~ claim 1 wherein the diacyl peroxide is incorporated into a particulate and said particle is comprised at a level of from about 0.1% to about 30%, ~~preferably from 1% to 15%, more preferably from 1.5% to 10%~~ of the total composition.
12. A detergent composition according to claim 1 wherein said bleach booster is selected from the group consisting of aryliminium zwitterions, aryliminium polyions having a net negative charge of from -1 to -3; and/or mixtures thereof.
19. A detergent composition ~~according to claim 18~~ wherein said bleach booster is an aryliminium zwitterion and R³ is H, Z is -OSO₃⁻, a is 1.
23. A detergent composition according to claim 22 wherein said peroxygen source comprises a preformed peracid compound selected from the group consisting of percarboxylic acids and salts, percarbonic acids and salts, perimidic acids and salts, peroxymonosulfuric acids and salts, and/or mixtures thereof; a hydrogen peroxide source, a bleach activator and/or mixtures thereof.

24. A detergent composition according to claim 23 wherein said hydrogen peroxide source is selected from the group consisting of perborate compounds, percarbonate compounds, perphosphate compounds and/or mixtures thereof.
25. A detergent composition according to claim 23 wherein said bleach activator is selected from the group consisting of tetraacetythylenediamine, sodium decanoyloxybenzene sulfonate, sodium nonanoyloxybenzene sulfonate, sodium octanoyloxybenzene sulfonate, (6-octanamido-caproyl)oxybenzenesulfonate, (6-nonanamido-caproyl)oxybenzenesulfonate, (6-decanamido caproyl)oxybenzenesulfonate, and/or mixtures thereof.
26. A detergent composition according to claim 1 wherein said pectate lyase is present at a level of from 0.0001% to 2%, ~~preferably from 0.0005% to 1.0, more preferably from 0.001% to 0.5%~~ pure enzyme by weight of total composition.
28. ~~Use A method of using of~~ a composition according to claim 1 for the removal of plant-, dirt-based stains, highly coloured food soils/stains and body soils comprising the step of contacting a fabric in need of treatment with the composition of claim 1.
29. ~~A method of using Use of~~ a composition according to claim 1 for superior fabric whiteness maintenance comprising the step of contacting a fabric need of treatment with the composition of claim 1.
30. ~~Use of~~ A method of using a composition according to claim 11 for effective highly coloured stains and soils removal on plasticware, ~~and/or for preventing the staining and/or discolouration of the dishware by highly coloured components~~ comprising the step of contacting a fabric need of treatment with the composition of claim 1.